

# World War, Then and Now

## World War III in the 21st Century

*Craig Arndt, D. Eng.*

**T**his is the first of three articles addressing some of the challenges facing the U.S. Department of Defense (DoD) in developing effective weapons and systems to meet the challenges of the 21st century. This first installment addresses a number of issues centering on the Global War on Terrorism (GWOT), including what it is, how it is being waged, what effect it is having on long-term national defense strategy and force structure planning, and the GWOT requirements for developing weapons and tactics to meet these challenges. The second article in the series will focus on engineering a new generation of weapons and systems to win the war on terrorism. The final article will examine new approaches and methods for developing and fielding more capable defense systems faster with a smaller defense acquisition infrastructure in the next century.

A little bit about myself and my perspective: For more than 30 years, I have been professionally researching, building and using military systems as a naval officer, engineer and researcher. I also helped develop systems including

---

**Arndt** is a professor and the chairman of the Engineering and Technology Department at the Defense Acquisition University, Fort Belvoir, Virginia. Arndt also has extensive experience as a senior executive and technology leader in the research, engineering and defense industries. As a senior scientist at the Air Force Labs and the Air Force Institute of Technology, he developed advanced smart bomb technology and advanced flight-control systems.

the B1-1 jet bomber, F-16 fighter, advanced radar systems, the Mine-Resistant Ambush-Protected (MRAP) vehicle, and national biometrics infrastructure. My father developed the first generation of Intercontinental Ballistic Missiles in the 1950s.

Two generations of engineers have devoted their lives to developing the weapons and systems we needed to win the Cold War. Now, however, the United States is struggling with what many people call a new kind of war against a new kind of enemy on both traditional and new kinds of battlefields.

It has long been known that terrorists can be both traditional and nonstate actors; this has been a problem for warfighting policy and tactics. Terror has been used by different groups both by leaders of nation-states, and by nonstate actors (insurgents, revolutionaries, etc.). The one thing these groups have in common is that they all have political objectives.

In order to effectively develop new policy, weapons and tactics, we need to look at and understand the nature of the war we are fighting, the nature of our enemy, and the new environment of the 21st century. Then we can finally begin developing the weapons we need to win the GWOT.

So, who is the enemy in the 21st-century GWOT and how do we characterize them in a way that is useful in the development of weapons and tactics to win this war? Some have described the enemy as radical Islamic jihadists. Some of these radicals include criminal elements within different countries and cultures. The different terrorist organizations describe themselves as insurgents and revolutionaries, or even the legitimate governments of nations. Although some such descriptions are accurate and useful, they do not provide the complete understanding needed to develop weapons and tactics.

One characteristic of our current highly distributed and loosely affiliated enemies in the GWOT is that their political objectives also are distributed. The different terrorist organizations' objectives are individually specific, but the groups still have much in common. First of all, they seek to substitute their rules for the legitimate rule of law. Second, they rule by violence and intimidation. And, third, they chose to mask their intentions with lies based on anything that their followers will believe. Many current terrorists put forth the lie that their cause is pursued in the name of religion, rather than to promote their true objective of power over other people. Looking at different political models, this generation of terrorists most closely follows the goals and rules of fascist groups.

Fascism is a form of radical authoritarianism that became prominent in early 20th-century Europe. Fascists sought to unify their nations or peoples through an authoritarian state led by a revolutionary political movement that aimed to reorganize the nation or people in accordance with the principles of fascist ideology. Fascist movements shared certain features, including the veneration of the state, unchallenged devotion to a strong leader, and an emphasis on elimina-

tion of diversity and of civil and human rights and the rule of law. Fascism views political violence, war and imperialism as the means to achieve national rejuvenation and asserts that stronger nations have the right to expand their territory by displacing weaker nations, races or religions.

In order to effectively engage and challenge terrorist groups, we look at the enemies' centers of gravity. The center of gravity is a concept developed by the 19th-century Prussian military strategist Gen. Carl von Clausewitz to identify a nation's or organization's key aspect or strength that allows it to wage war. The first center of gravity for terrorist organizations is their followers' unquestioning devotion. This devotion is developed by indoctrinating recruits into the organization's false belief system and instilling a fear of rejection by the group (which often can result in the murder of those who are rejected). The next center of gravity for terrorists involves the underlying goals of their leaders. In some cases, they wish to rule a land to enslave its people and plunder resources. The last key center of gravity comprises the terrorist organizations' operational resources. These resources are gained in many ways—through criminal activity, the plundering of territories, and the support of external individuals, groups and nations that gain from the advancement of the terrorists' goals.

The interconnected support of many of these different fascist organizations brings us back to the question of world wars. In order to form a strategy and to develop and acquire the weapons we need to fight and win the GWOT, we need to view the the GWOT as a world war. A world war by definition involves some of the world's most powerful and populous countries. World wars span multiple countries on multiple continents, with battles fought in multiple theaters. Based on that definition, the GWOT is definitely a world war. At the same time, it differs from past world wars.

In World War II, the Axis Powers (Germany, Italy and Japan), did not wage war until they were on a military par with their enemies. This was predicated on the traditional military and political theories of war prevailing at the time.

In the case of the current world war, the different terrorist groups wage war partly as a way to gather strength. In most traditional 20th-century wars, the conflicts depleted resources quickly and, therefore, created vulnerabilities for the combatants. Terrorist organizations have developed methods to use the acts of war (or attacks) to increase their resources. They use attacks to recruit followers and soldiers and also to demonstrate to their supporters a greater likelihood of future success. This model of warfare is fundamentally different than the previous unlimited world wars.


The concept of limited versus unlimited war is very important when we talk about terrorist organizations. The different terrorist organizations are waging unlimited war on the United States in that their goal is the complete destruction of the United States. But the U.S. war against the terrorist

organizations can only be characterized as a limited war. To better understand the principle of limited and unlimited war and in view of the asymmetrical nature of the GWOT, the terms and definitions of limited and unlimited war need to be re-examined.

Traditionally, unlimited wars seek to destroy all aspects of the enemy, including industry and to some extent the civilian population, in order to compel the enemy's submission. This definitely is the goal of terrorist organizations. Terrorists try to use asymmetrical warfare to gain an advantage over nations that fight wars in a more conventional manner. The terrorist

the terrorists use. It is important to deal with the terrorists' tactics, but doing so cannot in itself provide an effective long-term strategy.

The United States' ability to destroy terrorist enemies has been questioned repeatedly over the last few years. As part of a long-term strategy to eliminate these terrorist organizations' threats to the United States and to civilize the nations that provide their bases of operations, we need to attack and utterly destroy the terrorists' centers of gravity, which include again the unquestioning devotion of their followers, the ruthlessness of their leaders and their operational resources.



## **The dedication of the American public is incredibly powerful, and it will be a necessary part of combating our current enemies.**

organizations use both nontraditional weapons and nontraditional combatants (women and children). Their tactics and their agendas show a complete disregard for human life (both of their enemies and their followers).

Clearly, these terrorist organizations are engaging in what we call unlimited war. But what kind of war is the United States waging against the terrorist organizations? History has demonstrated that using the tactics of limited war to fight an unlimited war ends in disaster (the Vietnam War). Then the question becomes: How does the United States define and fight an unlimited war with nonstate actors that have total disregard for lives of their people and that choose to conceal themselves and their true motives?

In their pursuit of total war, the terrorist organizations use a wide range of tactics, including mass murder, slavery and indoctrination. By using the Internet and modern social media, this generation of terrorists has added to the weapons and tactics of earlier generations. These methods allow the terrorists to continuously wage war against the United States and other free states.

Many analysts had called the GWOT the long war because of the diversity of the war and enemy but also because of our failure to find effective ways of dealing with many of the tactics

The United States has many weapons and capabilities for fighting our wars. However, we need to develop new weapons to win this war, and these must be weapons of unlimited war, designed to utterly destroy these centers of gravity for all time. During World War II, the United States developed many new weapons and strategies (the atomic bomb, heavy bombing of civilian and industrial centers, naval aviation, etc.). However, the greatest and most important weapon of that war was the involvement and dedication of every American citizen.

The dedication of the American public is incredibly powerful, and it will be a necessary part of combating our current enemies, who lie, deceive, enslave and kill with no remorse and with an efficiency augmented by use of the Internet and other electronic and social media.

### **Conclusions**

Based on this new more complete understanding of the nature of the GWOT, we can come to a few critical conclusions. First, the United States is at war with terrorist organizations, if for no other reason, because they are at war with the United States. As in the Cold War, the GWOT is a real war with real battles. But unlike the Cold War, our enemies in the GWOT include both nation-states and nonstate players. The jihadi movement consists of loosely affiliated fascist organizations engaged in

unlimited war against anyone that they believe stands in the way of their gaining wealth and power.

Many analysts tell us that these terrorists fundamentally differ from other enemies faced by the United States in the past. The enemy is not fundamentally different. The United States fought wars against fascists before—most recently against Saddam Hussein and Iraq's Ba'ath Party. Although the nature of the enemies is the same, their methods and tactics have changed and evolved. The clear conclusion is that the nature of war and combat is changing. The advent of nonstate actors, social networking and the 24-hour news cycle have changed the nature of the capabilities and the tactics of the terrorist organizations and modern war. The changes in the nature of war are evidenced by the fact that our traditional adversaries (in this case, China and Russia) use some of the same tactics as terrorist organizations. From a strategic standpoint, therefore, terrorist organizations are more opportunistic than innovative.

The weapons of hatred, brainwashing, slavery, brutality, lying and the hijacking of religion have been used by fascistic forces

for centuries. Current available technology has made these weapons more powerful and given them greater reach and penetration. In the past, we battled fascist foes with the weapons of traditional state-to-state warfare. However, traditional state-to-state warfare methods are problematic in engaging nonstate actors. Previously, the United States has waged the GWOT as a limited war, which has yielded a key advantage to our enemies. In order to ultimately defeat these enemies, we need additional weapons, systems and tools. These weapons will need to be based in a new class of unlimited war and an understanding of what that means to the DoD.

In the second part of this series of articles, I will address how the United States defines this new unlimited war and how the research and engineering community will develop a new generation of weapons in order to secure victory. The last article in this series will address fundamental changes needed in the DoD's approach to acquisition to support the requirements for a new generation of weapons to win the GWOT. &

The author can be contacted at [craig.arndt@dau.mil](mailto:craig.arndt@dau.mil).

# PROGRAM MANAGERS e-TOOL KIT

<https://pmtoolkit.dau.mil/>

*The Program Managers e-Tool Kit provides the program management resources of the popular print Program Managers Tool Kit in a dynamic Web-based format.*

*The e-Tool Kit features:*

- Continual content updates
- Live policy links
- Links to informative ACQuipedia articles and related communities of practice.



Visit  
<https://pmtoolkit.dau.mil/>  
today to explore this convenient tool!

